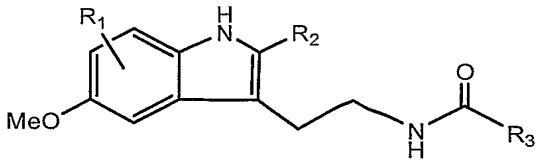
WHAT IS CLAIMED IS:

1. A compound of the formula



wherein

R_1 is hydrogen, halo, or nitrate,

R_2 is C_4-C_{20} aryl, and

R_3 is C_1–C_{30} alkyl, C_2–C_{22} alkenyl, C_4-C_{20} aryl, OR_4, SR_4, NR_4R_5, $(CH_2)_nOR_4$, $(CH_2)_nSR_4$, $(CH_2)_nNR_4R_5$, $(CH_2)_nCOR_5$.

wherein

n is 0-10;

R_4 and R_5, which can be the same or different, are hydrogen, C_1-C_8 alkyl, C_1-C_6 alkenyl and C_4-C_{10} aryl.

2. The compound of claim 1, wherein R_3 is C_1-C_6 alkyl or C_1-C_6 alkoxy.

3. The compound of claim 1, wherein R_1 is hydrogen, R_2 is C_4-C_{20} aryl, and R_3 is methyl.

4. The compound of claim 1, wherein R_1 is hydrogen, R_2 is C_4-C_{20} aryl, and R_3 is ethyl.

5. The compound of claim 1, wherein R_1 is hydrogen, R_2 is C_4-C_{20} aryl, and R_3 is cyclopropyl.

6. The compound of claim 1, wherein R_1 is hydrogen, R_2 is C_4-C_{20} aryl, and R_3 is cyclobutyl.

7. The compound of claim 1, wherein R_1 is hydrogen, R_2 is C_4-C_{20} aryl, and R_3 is methoxy.

8. The compound of claim 1, wherein R_1 is hydrogen, R_2 is C_4-C_{20} aryl, and R_3 is ethoxy.

9. The compound of claim 1, wherein R_1 is hydrogen, R_2 is C_4-C_{20} aryl, and R_3 is amino.

10. The compound of claim 1, wherein R_1 is hydrogen, R_2 is C_4-C_{20} aryl, and R_3 is dimethylamino.

11. The compound of claim 3 , wherein R_2 is selected from the group consisting of 4-(fluorophenyl), 3-(fluorophenyl), 2-(fluorophenyl), 4-(chlorophenyl), 3-(chlorophenyl), 2-(chlorophenyl), 4-(methylphenyl), 3-(methylphenyl), 2-(methylphenyl), 4-(methoxyphenyl), 3-(methoxyphenyl), 2-(methoxyphenyl), 4-(ethoxyphenyl), 3-(ethoxyphenyl), 2-(ethoxyphenyl), 4-(vinylphenyl), 4-(acetylphenyl), 3-(acetylphenyl), 2-(acetylphenyl), 4-(trifluoromethylphenyl), 3-(trifluoromethylphenyl), 4-(trimethylsilylphenyl), 3-(trimethylsilylphenyl), 4-(methylthiophenyl), 4-(*tert*-butylphenyl), 4-(dimethylaminophenyl), 4-(ethylphenyl), 4-(benzoxyphenyl), 4-(biphenyl), 2-furanyl, 2-(thiophenyl), 2-(5-methylthiophenyl), 3-(thiophenyl), 2-(indolyl), 1-(naphthalenyl), 2-(naphthalenyl), 4-(dibenzofuranyl), 1-(thianthrenyl), 2,3-(dichlorophenyl), 2,5-(dichlorophenyl), 3,4-(dichlorophenyl), 3,5-(dichlorophenyl), 2,3-(difluorophenyl), 2,4-(difluorophenyl), 2,5-(difluorophenyl), 2,6-(difluorophenyl), 3,4-(difluorophenyl), 3,5-(difluorophenyl), 3,5-(dibromophenyl), 3,5-(bis(trifluoromethyl)phenyl), 2,3-(dimethylphenyl), 2,5-(dimethylphenyl), 2,6-(dimethylphenyl), 3,5-(dimethylphenyl), 2,4-(dimethoxyphenyl), 2,5-(dimethoxyphenyl), 3,4-(dimethoxyphenyl), 2,3,4-(trimethoxyphenyl), 2,4,6-(trifluorophenyl), and 2,3,4,5,6-(pentaflurophenyl).

12. The compound of any of claims 2-10, wherein R_2 is selected from the group consisting of phenyl, 4-(fluorophenyl), 3-(fluorophenyl), 2-(fluorophenyl), 4-(chlorophenyl), 3-(chlorophenyl), 2-(chlorophenyl), 4-(methylphenyl), 3-(methylphenyl), 2-(methylphenyl), 4-(methoxyphenyl), 3-(methoxyphenyl), 2-(methoxyphenyl), 4-(ethoxyphenyl), 3-(ethoxyphenyl), 2-(ethoxyphenyl), 4-(vinylphenyl), 4-(acetylphenyl), 3-(acetylphenyl), 2-(acetylphenyl), 4-(trifluoromethylphenyl), 3-(trifluoromethylphenyl), 4-(trimethylsilylphenyl), 3-(trimethylsilylphenyl), 4-(methylthiophenyl), 4-(*tert*-butylphenyl), 4-(dimethylaminophenyl), 4-(ethylphenyl), 4-(benzoxyphenyl), 4-(biphenyl), 2-furanyl, 2-(thiophenyl), 2-(5-methylthiophenyl), 3-(thiophenyl), 2-(indolyl), 1-(naphthalenyl), 2-(naphthalenyl), 4-(dibenzofuranyl), 1-(thianthrenyl), 2,3-(dichlorophenyl), 2,5-(dichlorophenyl), 3,4-(dichlorophenyl), 3,5-(dichlorophenyl), 2,3-(difluorophenyl), 2,4-(difluorophenyl), 2,5-(difluorophenyl), 2,6-(difluorophenyl), 3,4-(difluorophenyl),

3,5-(difluorophenyl), 3,5-(dibromophenyl), 3,5-(bis(trifluoromethyl)phenyl), 2,3-(dimethylphenyl), 2,5-(dimethylphenyl), 2,6-(dimethylphenyl), 3,5-(dimethylphenyl), 2,4-(dimethoxyphenyl), 2,5-(dimethoxyphenyl), 3,4-(dimethoxyphenyl), 2,3,4-(trimethoxyphenyl), 2,4,6-(trifluorophenyl), and 2,3,4,5,6-(pentaflurophenyl).

13. The compound of claim 1, wherein the compound is N-(2-(2-(4-fluorophenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

14. The compound of claim 1, wherein the compound is *N*-(2-(5-methoxy-2-methoxyphenyl-1*H*-indol-3-yl)ethyl)acetamide.

15. The compound of claim 1, wherein the compound is *N*-(2-(5-methoxy-2-p-tolyl-1*H*-indol-3-yl)ethyl)acetamide.

16. The compound of claim 1, wherein the compound is *N*-(2-(2-(4-*tert*-butylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

17. The compound of claim 1, wherein the compound is *N*-(2-(2-(3-trifluoromethylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

18. The compound of claim 1, wherein the compound is *N*-(2-(2-(4-trifluoromethylphenyl)-5-methoxy-1*H*-indol-3-yl)ethyl)acetamide.

19. A method for preparing the compound of claim 1, which method comprises reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.

20. A method for preparing the compound of claim 2, which method comprises reacting a 2-halo melatonin with aryl boronic acid in the presence of palladium catalyst.

21. A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

22. A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 2 and a pharmaceutically acceptable carrier or diluent.

23. The pharmaceutical composition of claim 21, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 1.

24. The pharmaceutical composition of claim 22, wherein the pharmaceutical composition comprises nanoparticles of the compound of claim 2.

25. The pharmaceutical composition of claim 21, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 1 and a pharmaceutically acceptable anesthetic carrier.

26. The pharmaceutical composition of claim 22, wherein the pharmaceutical composition comprises an anesthetic inducing effective amount of the compound of claim 2 and a pharmaceutically acceptable anesthetic carrier.

27. A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 21.

28. A method of inducing sedation, hypnosis and/or sleep, or general anesthesia in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 22.

29. The method of claim 27, wherein said administering is by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.

30. The method of claim 28, wherein said administering is by a method selected from the group consisting of oral administration, nasal respiratory administration, bolus injection, intravenous administration, continuing infusion, rectal administration, vaginal administration, sublingual administration, and cutaneous administration.

31. A method for treating sleep disorders or chronobiological disorders in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 21.

32. A method for treating sleep disorders or chronobiological disorders in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 22.

33. A method for treating a condition affected by melatonin activity in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 21.

34. A method for treating a condition affected by melatonin activity in a patient, which method comprises administering to the patient a therapeutically effective amount of the pharmaceutical composition of claim 22.

35. The method of claim 33, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.

36. The method of claim 34, wherein the condition affected by melatonin activity is selected from the group consisting of depression, epilepsy, jet-lag, work-shift syndrome, sleep disorders, glaucoma, reproduction, cancer, premenstrual syndrome, immune disorders, inflammatory articular diseases, neurodegenerative diseases of the central nervous system, and neuroendocrine disorders.